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Guidelines for Maintaining High Conception in the Cow Herd While Using A.I.

Artificial insemination (AI) offers cattle producers access to a wide selection of genetically superior sires and it is a tool for disease control. However, artificial insemination is of no value unless inseminated cows conceive following AI. Proper attention paid to heat detection and semen storage and handling will go a long way toward improving the conception rate in a herd.

Heat detection

- Check cows for signs of heat twice a day. Each observation period should be at least 30 minutes long.
- Gomer (surgically altered) bulls or androgenized females equipped with chin ball markers can help detect cows in heat. Herdsmen may also improve their accuracy in detecting cows in heat by using heat detector patches and other heat detecting aids.

Semen storage and handling

- Buy semen from reputable inseminating businesses licensed by Alberta Agriculture. Semen quality can be tested upon request by the Semen Evaluation Laboratory in Airdrie (Telephone 948-8511).
- Ensure that semen storage tanks are well protected and that nitrogen levels are maintained in the tanks.
- Follow the specific recommendations of the semen processor when thawing semen. The correct thawing technique for semen may vary from one AI organization to another. If the thawing method is not known for a semen sample, the semen should be thawed by placing the sample in a 35° C water bath for 40 seconds.

Insemination

- Use a licensed AI technician, or learn how to inseminate by attending an AI training course. To become proficient at AI, the inseminator must Practise! Practise! Practise!
- Avoid placing cows that will be serviced in stressful conditions.

Management

- Obtain information on the fertility rating of all bulls whose semen is used in the herd. The information is available from licensed inseminating businesses and AI studs.
- Ensure that cows are in adequate body condition (body condition score of 2.5 - 3.0) and that the cows are receiving proper amounts of nutrients and trace minerals. Questions about feeding should be directed to the district agriculturist, regional livestock specialist, or other qualified nutritionist.
- Enroll in a herd health program serviced by a veterinarian specializing in cattle.
- Cull cows that require more than three services to conceive. Any animals that have a history of breeding problems should be removed from the herd.

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Copies of this and related publications may be obtained from the Print Media Branch, Alberta Agriculture, 7000 - 113 Street, Edmonton T6H 5T6 or Alberta Agriculture's District Offices.